

FAQ from 2010 Integrated Report Webinar
Hosted by Darryl Glover,
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August 26, 2010

1. Q: What is involved in a TMDL implementation plan?

A: A TMDL Implementation plan is a site-specific study, usually prepared several years after TMDL development, detailing the suite of corrective actions and best management practices (BMPs) needed to reduce pollution enough to get an impaired waterbody back into compliance with Water Quality Standards (WQS), as well as outlining a schedule for these actions and associated monitoring. Once fully implemented, the plan should result in a water “fully supporting” WQS. Appendix E in the report provides more information about TMDLs.

2. Q: Where will the presentation be located for later viewing?

A: The presentation is now [online](#), located on the 2010 IR webpage.

3. Q: When will GIS files of draft 2010 be available to download?

A: DEQ Water Quality Assessment GIS data is not made available to the public while the report is in draft. Every assessment requires minor changes and discussion with EPA during their review. Once we receive EPA approval of the 2010 assessment, and are assured no additional changes are needed, the GIS files will be finalized and posted to the DEQ website, where they will be available for download.

4. Q: When will other TMDLs be developed?

A: DEQ is currently developing a list of 75-100 TMDLs to be developed during the upcoming year. Concurrently, TMDL staff will analyze our 2010 assessment report and develop a long term schedule to address all newly listed impairments. Appendix E in the report provides more information about TMDLs.

5. Q: How do citizens participate in the watershed monitoring?

A: DEQ routinely seeks help from the public to enhance our water quality monitoring program. The public’s level of participation can include nominating a waterbody for DEQ monitoring, reporting a pollution event, or volunteering to monitor a waterbody.

Volunteer monitoring is an important way DEQ expands the network of stations across the state. The 2010 report included citizen monitoring data from over 1,200 sites.

Additional information about how citizens can become involved in water quality monitoring is available on our website www.deq.virginia.gov/cmonitor.

6. Q: Will high resolution hydrology files be used in 2010 or 2012 cycle?

A: The agency is in the process of developing Virginia's portion of the high resolution National Hydrology Dataset layer for use in future assessments. This task also involves a few other state and federal agencies. Some high resolution data was used in the 2010 report. We predict it will be fully phased in by the 2014 report.

7. Q: How will the results of this assessment affect the development of draft WIPs due to EPA Sept 1, 2010?

A: As it relates to completed TMDL Implementation Plans and/or waterbodies attaining standards, the net impact on the Bay WIP would be credits for attaining Water Quality Standards for those waters that get delisted (removed) from the Impaired Waters List.

8. Q: Will the Bay TMDLs that EPA develops go before the State Water Control Board for information or approval? How about the WIPs?

A: Both draft TMDLs and WIPs will be released for a 60-day public review and comment period, which could include meetings and hearings. The estimated release date is September 24, 2010 for the first version of the WIP. Ultimately, the TMDL will go before the SWCB for adoption, then to EPA for approval.

9. Q: Does DEQ staff have to visit each watershed that gets assessed?

A: DEQ has alliances with citizen monitoring groups across the state. Those that meet DEQ Quality Assurance/Quality Control guidelines, have their data used the same as those collected "by DEQ." An impressive total of 3,100 river miles, 29,000 acres of lake/reservoir waters, and 40 square miles of estuarine waters were monitored by citizens. There was one watershed that was monitored exclusively by citizens. DEQ also accepts data collected by certain federal and other state agencies, as well as local municipalities and water treatment facilities. These data must meet the same guidelines required for citizen monitoring groups.

10. Q: Is water quality assessment only based on monitoring data?

A: Our 2010 assessment was based on monitoring data. However, we do permit the use of "computer-based modeling" for assessment under limited conditions.

11. Q: Please comment on how this assessment relates to the Healthy Waters Program by DCR.

A: The assessment is related to the Healthy Waters initiative in that it identifies not only waters that are impaired, but waters that have been monitored and found to meet Water Quality Standards.

12. Q: Is there a summary available describing the waterbodies that are being either fully or partially delisted and the possible reasons for delisting (TMDL Implementation, standard changes, other efforts?). Such a document would be useful if there are successful efforts people might want to replicate.

A: Chapter 3.5 in the Integrated Report contains the list of waterbodies that were delisted for this cycle. In it we explain why a water is being delisted (e.g., the water now meets dissolved oxygen Standards) but it is often only possible to speculate on the ultimate reasons. Many variables can affect a given waterbody, including non-human influences on the environment that occur independent of implementation activities.

13. Q: Was remote monitoring used for any part of the assessment?

A: We use aerial photography for assessment of water quality standards regarding the presence of submerged aquatic vegetation in the Chesapeake Bay and Tidal tributaries. Other than this, we do not currently use data collected through remote monitoring technologies for our assessment of water quality. There is no broad scientific consensus on how best to use it for that purpose. However, DEQ is continuing to seek ways to use it in future assessments.

14. Q: Does the report show the locations of all the monitoring stations?

A: After EPA's review of our assessment-related GIS files, these data are finalized and posted to the DEQ website, on the assessment report page, where station locations can be downloaded by the public.

15. Q: Regarding the trend analysis of bacteria, what constitutes a statistically significant improvement?

A: For all parameters we conclude a statistically significant improving trend if the data gives us 90% statistical confidence of that trend (i.e. if the linear regression has a non-zero slope and the p-value is greater than or equal to 0.10.)

16. Q: Do you take into account citizens' comments about what they see on the ground?

A: Citizen input is very important to our work. Regularly, we receive calls from the public who notice unusual conditions in the waterbodies. We respond to these calls in a prompt manner through our Pollution Response Program or by other means. Participation at public meetings and comment periods also helps our agency to refine proposed water quality projects so that the observations and concerns of the public are effectively addressed. In addition, citizen nomination of waterbodies for future DEQ sampling helps our agency target areas that are of interest and concern to the public.

17. Q: Were the majority of the delisted waters removed because of improved water quality or because of a change of use?

A: Most waters were delisted because of both improved water quality and regulatory changes in standards. This varied largely by parameter. Waters that were delisted due to use removal had previously contained the shellfish use. This use is removed when conditions are deemed unsuitable for shellfish because of natural causes or because of the presence of a nearby discharge outfall.

18. Q: Out of the watersheds with completed implementation plans, are any of those waterbodies meeting standards for what they were listed for?

A: There are two that we can confirm at this time: Muddy Creek B22R-01-NO3 Nitrate-Nitrogen in a PWS Rockingham County Federal TMDL ID# 7688 (Both TMDL and IP) Mill Creek B48R-01-BEN Benthic Macroinvertebrate Shenandoah County Federal TMDL ID# 24533 (TMDL only). There are several others that are near attainment.

19. Q: Has a trend analysis been performed? If so what does it indicate?

A: A trend analysis was first performed by DEQ and documented in our 2006 assessment report. The Interim Measures of Water Quality (IWQ) Score that we produced since then is a nonparametric trend analysis of pooled scored data compared to reference data within the same geographic strata. We establish what is considered a reference value for each variable for each geographic strata by season within the 2000 to 2009 time period. We then compare the reference value to the seasonally adjusted pooled values for each year.

20. Q: When will the Chesapeake Bay TMDLs be released?

A: The final Bay TMDL is due to be published in the Federal Register by December 31, 2010.